

REMARKS

Applicant gratefully acknowledges the interview conducted with the Examiner on December 23, 2002. Applicant has attempted to address the issues raised by the Examiner in the interview with this response.

Applicant requests reconsideration of the application in view of the preceding amendments and the following remarks. Claims 1, 12, 15, 16 and 19 have been amended. Claims 1-22 are pending. Claims 1, 12, 15, 16, 19 and 22 are independent claims. Support for the amendments to the claims is found in the specification and drawings as filed. No new matter has been added in making the amendments herein.

35 U.S.C. §102(b) REJECTIONS

The Examiner rejected claims 1-3, 6, and 8-13 under 35 U.S.C. § 102(b) as being anticipated by Dayton, U.S. Patent No. 5,778,075. Applicant respectfully disagrees with the Examiner's reading of the cited reference and traverses these rejections.

Applicant respectfully submits that Dayton does not teach or suggest a polymeric film or sheet or tube that is retained to the structural support by the roughened or patterned outer surface, as recited in independent claims 1 and 12. Dayton teaches tabs 19, 20 which engage holes 17 in the stent 11, thereby preventing the stent from recoiling to its smaller delivery diameter. (See Dayton at col. 5, ll. 59-64, col. 6, ll. 4-17 and 32-38, and FIGS. 2-4 and 8-10). Furthermore, although Dayton teaches a stent with a polymer forming the exterior surface, if the coating were retained by the tabs, it would not be true that "no tabs are needed ... since this stent will have an outward biasing tendency." Dayton col. 6, ll. 44-45. An outward biasing tendency should have no effect on the need for the tabs if the tabs are necessary to retain the coating. Applicant respectfully submits that the tabs taught by Dayton are solely for the purpose of preventing the expanded stent from recoiling and the polymer is not retained by the tabs.

Although Applicant disagrees with the Examiner's reading of Dayton, independent claims 1 and 12 have been amended to further differentiate between the present invention and the

teachings of the Dayton reference. Claim 1 has been amended to recite that the polymeric film or sheet or tube has a first end and second end, the first end attached to the structural support and the film or sheet or tube is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end. Claim 12 has been amended in a similar fashion. Support for the amendments is found in the specification at pg. 7, ll. 3-13 and FIGS. 7, 8A and 8B. The overlapping of the layers of the film or sheet or tube allows it to uncoil and expand in order to match expansion of the structural member. See specification at pg. 6, ll. 19-20.

It is respectfully submitted that amended claims 1 and 12 are patentable over Dayton, which neither teaches nor suggests a film that has a first end and is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end. It is respectfully noted that Dayton teaches a stent with a polymer forming the exterior surface, the polymer is a coating which is formed when the stent is “dip[ped]” or “submerge[d]” in a solution or when a solution is “sprayed” or “pour[ed]” on the stent. Dayton col. 6, ll. 54-56 and col. 7, ll. 34-55. Applicant respectfully asserts that the coating of Dayton has no first end or second end and is not wrapped around the stent such that it overlaps itself. Therefore, Applicant further respectfully asserts that independent claims 1 and 12, as well as claims 2, 3, 6, 8-11 and 13 which depend therefrom, are allowable over Dayton.

The Examiner rejected claims 1, 8, 15, 16 and 19 under 35 U.S.C. § 102(b) as being anticipated by Kaster, U.S. Patent No. 4,441,215. Applicant respectfully traverses these rejections.

As noted above, Applicant has amended independent claim 1 to recite that the polymeric film or sheet or tube has a first end and second end, the first end attached to the structural support and the film or sheet or tube is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end. Applicant has also amended independent claims 15, 16 and 19 to recite the same limitations. Applicant respectfully submits that Kaster neither teaches nor suggests a film that has a first end and is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end.

It is respectfully noted that Kaster teaches a material 30 or sleeve 32 which is adhered to a vascular graft 10, neither the material nor the sleeve wrapped such that the material or sleeve overlaps itself. See Kaster at c. 6, ll. 32-44 and FIGS 3 and 4. Applicant respectfully asserts that independent claims 1, 15, 16 and 19 are, therefore, allowable over Kaster. Applicant further respectfully asserts that claim 8, which depends on claim 1, is also allowable over the cited reference.

The Examiner rejected claims 16-21 under 35 U.S.C. § 102(b) as being anticipated by Yan, U.S. Patent No. 5,843,172. Applicant respectfully traverses these rejections.

As noted above, Applicant has amended independent claims 16 and 19 to recite that the polymeric film or sheet or tube has a first end and second end, the first end attached to the structural support and the film or sheet or tube is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end. Applicant respectfully submits that Yan neither teaches nor discloses these limitations.

Applicant respectfully notes that Yan teaches “laminating” or “solvent cast[ing]” the polymeric film to the surface of the structural member or “encapsulating” the metal structure in the layers of polymeric material. Yan at col. 9, ll. 41-50. However, Applicant respectfully asserts that nowhere in Yan is it taught that the polymeric film is wrapped around the structural member or that a first and second layer are formed with the second layer overlapping the first. Applicant respectfully asserts that independent claims 16 and 19 are, therefore, allowable over Yan. Applicant further respectfully asserts that claims 17-18, which depend upon claim 16, and claims 20-21, which depend upon claim 19, are also allowable over Yan.

35 U.S.C. §103(a) REJECTIONS

The Examiner rejected claims 5 and 7 under 35 U.S.C. § 103(a) as being unpatentable over Dayton in view of Williams, U.S. Patent No. 5,423,885. Applicant respectfully traverses these rejections.

As noted above, Dayton does not teach or suggest a polymeric film or sheet or tube that is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end, as recited in amended claim 1 of the present invention.

Applicant further respectfully submits that Williams also does not teach or suggest the aforementioned limitations recited in claim 1. Therefore, Applicant respectfully asserts that claim 1 is allowable over the cited references. Applicant further respectfully asserts that claims 5 and 7, which depend upon claim 1, are also allowable over the cited references.

The Examiner rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Dayton as a matter of design choice. Applicant respectfully traverses this rejection.

As noted above, claim 12 is allowable over Dayton since Dayton does not teach or suggest a polymeric film or sheet or tube that is wrapped around the structural support such that a first and second layer are formed with the second layer overlapping the first end. Applicant respectfully asserts that claim 14, which depends upon claim 12, is also allowable over Dayton.

ALLOWABLE SUBJECT MATTER

Applicant is grateful for the Examiner's allowance of claim 22 and for the suggestion of allowable subject matter based on claim 4. Applicant has amended claim 1, upon which claim 4 depends, and for the reasons noted above, believes that claim 1 is allowable. Applicant therefore believes that claim 4 is also in condition for allowance.

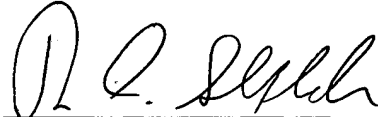
CONCLUSION

Applicant has attempted to respond to each and every objection and rejection set forth in the outstanding Office action. In view of the above amendments and remarks, Applicant respectfully requests that the application be reconsidered, the claims allowed and the application passed to issue.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

The following claims have been amended as indicated:

1. (Twice Amended) A stent, comprising:
a structural support comprising an outer surface that is roughened or patterned and having a first unexpanded configuration and a second expanded configuration; and
a polymeric film or sheet or tube that overlays the structural support, the polymeric film or sheet or tube having a first end and a second end, the first end attached to the structural support and wrapped around the structural support such that a first layer and second layer are formed, the second layer overlapping the first end when the structural support is in the unexpanded configuration, and wherein the polymeric film or sheet or tube is retained to the structural support by the roughened or patterned outer surface and fills in gaps in the roughened or patterned outer surface such that the exterior surface of the stent is smooth.

12. (Twice Amended) A system for retaining a polymeric film or sheet or tube having a first end and a second end on a stent, comprising a roughened or a patterned outer surface on the stent wherein the polymeric film or sheet or tube [fills in gaps in] is retained to the stent by the roughened or patterned outer surface and is wrapped around the stent such that a first layer and second layer are formed, the second layer overlapping the first end and the film or sheet or tube filling in gaps in the stent such that the exterior of the stent is smooth.

15. (Twice Amended) A method for adhering a polymeric sheet to a stent structural member, comprising:

providing a stent structural member with an outer surface;
providing a polymeric sheet or tube having a first end and a second end;
roughening or patterning the outer surface of the stent structural member with a raised textured design; and
retaining the polymeric sheet or tube on the stent structural member [such that] with the roughened or patterned outer surface and wrapping the sheet or tube around the structural member such that a first layer and second layer are formed, the second layer overlapping the first end and the polymeric sheet or tube fills gaps in the roughened or patterned outer surface to form a smooth exterior surface.

16. (Amended) A stent assembly, comprising:

a structural member with an outer surface that is roughened or texturized and having a first unexpanded configuration and a second expanded configuration; and

a polymeric sleeve wherein the polymeric sleeve [is] has a first end and a second end, the first end retained to the structural member by the roughened or texturized surface, and wrapped around the structural member such that a first layer and second layer are formed, the second layer overlapping the first end when the structural member is in the unexpanded configuration.

19. (Amended) A stent assembly, comprising:

a structural member with an outer surface that is roughened or textured and having a first unexpanded configuration and a second expanded configuration; and

a polymeric sheet wherein the polymeric sheet [is] has a first end and a second end, the first end retained to the structural member by the roughened or textured surface, and wrapped around the structural member such that a first layer and second layer are formed, the second layer overlapping the first end when the structural member is in the unexpanded configuration.